Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:

Determining sex ratios of turtle hatchlings

1.2. Summary description of the data:

Previous status assessments of marine turtles have assumed that the natural sex ratio of a marine turtle population is 1:1 (e.g. Conant et al. 2009). However, this is largely speculative and is based on few data, a troubling fact considering the importance of sex ratios when modeling the status of marine turtle populations. Marine turtles exhibit temperature sex determination (TSD), such that the overall sex ratio of hatchlings produced on a nesting beach is affected by the incubation temperatures on that beach (Mrosovsky and Yntema 1980, Rimblot et al. 1985). This creates unique susceptibility of marine turtles to global climate change and deforestation at nesting beaches (Hawkes et al. 2007). And although research has shown that the temperature threshold may vary among species and beaches, there are relatively few studies on hatchling sex ratios (Chevalier et al. 1999, Wibbels 2003, Mrosovsky et al. 2009). Considering the extreme importance of knowing sex ratio when modeling population abundance and trends, it is essential to conduct studies to determine sex ratio at various nesting beaches. In this study, we proposed to monitor thermal environments at the St. Croix, USVI, leatherback turtle nesting beach and the Bahia de Jiquilisco-Xiriualtique Biosphere Reserve in El Salvador for hawksbill turtles.

During the nesting season in 2012, temperature loggers (HOBO U22) were deployed in 42 nests (20 relocated and 22 in situ nests, of which 39 were retrieved). Temperature loggers (n = 55) also were placed on the beach at 50 cm from the surface, corresponding to the approximate depth of a next. Of the 55 loggers, 23 were retrieved but 32 were lost due to unexpected beach erosion during this season. Eighty eight nests have been excavated and naturally deceased hatchlings and unhatched embryos (n = 487) collected. This sample size was approximately five times more than expected. Gonad samples are preserved in formalin and were shipped to Florida Atlantic University at the end of the season for anatomical and histological examinations. As of late April 2013, 101 samples have been histologically examined. Of these 101 samples, the sex of 12 could not be determined because of advanced decomposition. For the remainder, 11 (12%) were male and 78 (88%) were female, indicating female-skewed sex ratio at this nesting beach.

Histological examinations are underway to determine the remainder of the samples. Although the thermal profile of the nesting beach for this year has not been created, a similar project was conducted in the previous years by a graduate student (Emily Weston) of Jeanette Wyneken (TE is a committee member).

1.3. Is this a one-time data collection, or an ongoing series of measurements?
Ongoing series of measurements

1.4. Actual or planned temporal coverage of the data:
2012-04 to Present

1.5. Actual or planned geographic coverage of the data:
U.S. Virgin Islands and El Salvador

1.6. Type(s) of data:
(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Document (digital)

1.7. Data collection method(s):
(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)
Instrument: Thermometer
Platform: Not applicable
Physical Collection / Fishing Gear: None

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:
Tomo Eguchi

2.2. Title:
Metadata Contact

2.3. Affiliation or facility:
Southwest Fisheries Science Center

2.4. E-mail address:
Tomo.Eguchi@noaa.gov

2.5. Phone number:
(858) 546-5615

3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:

Tomo Eguchi

3.2. Title:

Data Steward

4. Resources

Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?

No

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

Unknown

5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Lineage Statement:
Data are error checked and stored in a secure server.

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

5.2. Quality control procedures employed (describe or provide URL of description):

Checked for outliers

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?

Yes

6.1.1. If metadata are non-existent or non-compliant, please explain:

6.2. Name of organization or facility providing metadata hosting:
NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:
https://inport.nmfs.noaa.gov/inport/item/12736

6.4. Process for producing and maintaining metadata
(describe or provide URL of description):
Metadata produced and maintained in accordance with the NMFS Data Documentation Procedural Directive: https://inport.nmfs.noaa.gov/inport/downloads/data-documentation-procedural-directive.pdf

7. Data Access
NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?
No

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?
No

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:
None

7.2. Name of organization of facility providing data access:
Southwest Fisheries Science Center

7.2.1. If data hosting service is needed, please indicate:

7.2.2. URL of data access service, if known:
http://swfsc.noaa.gov/prd-turtles.aspx

7.3. Data access methods or services offered:
Contact the PI

7.4. Approximate delay between data collection and dissemination:

3 years

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

A graduate student had to complete a master's thesis.

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

Other

8.1.1. If World Data Center or Other, specify:

SWFSC

8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

8.2. Data storage facility prior to being sent to an archive facility (if any):

Southwest Fisheries Science Center - La Jolla, CA

8.3. Approximate delay between data collection and submission to an archive facility:

1 year

8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

Data are stored in a secure server.

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.